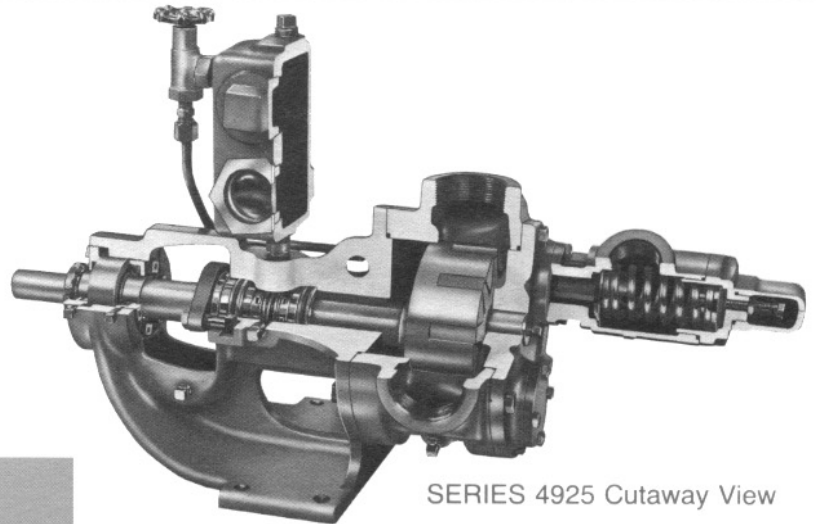


FEATURES

① Maximum Pump Differential Pressure	50 PSI
② Minimum Operating Temperature	-40° F.

GPM 10 - 20 - 30 - 50 - 60
③ (Nominal Rating)



SERIES 4925 Cutaway View

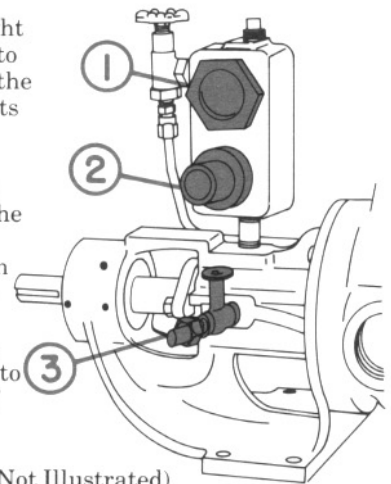
<p>① Ni-Resist Stationary Seat ② Neoprene O-Rings ③ Carbon Rotating Face ④ Buna-N Bellows ⑤ Plated Steel Metal Parts ⑥ Stainless Steel Spring ⑦ Stainless Steel Anti-Rotation Pins ⑧ Seal Holder (cap) ⑨ Seal Plate</p> <p>DOUBLE MECHANICAL SEAL (Standard Equipment)</p> <p>Viking's Refrigeration Ammonia Pumps are furnished with a double mechanical seal. This seal is fitted with Neoprene rubber parts, special carbon washers, Ni-Resist seal seats, and a stainless steel spring. The entire seal area is pressurized by refrigeration oil stored in an oil reservoir directly above it.</p>	<p>PRESSURIZED SEAL CHAMBER AND OIL RESERVOIR (Standard Equipment)</p> <p>All Series 4925 pumps are furnished with a special pressurized seal chamber and oil reservoir. Sealing with oil instead of ammonia gives longer seal life and eliminates leakage of ammonia.</p>
<p>LUBRICATED IDLER BUSHING (Standard Equipment)</p> <p>A pressure lubrication system is built into Viking Series 4925 Refrigeration Ammonia (in the "K" through "LL" sizes) pumps to automatically lubricate the idler bushing. This system provides a constant film of liquid between the idler bushing and idler pin at a pressure equal to the pump discharge pressure, regardless of pump rotation.</p>	<p>ADJUSTABLE RETURN-TO-TANK BYPASS VALVE (Standard Equipment)</p> <p>This easily adjusted valve permits bypassing the ammonia back into the accumulator in the event of an obstruction or shutoff of the discharge line. If reversing pump rotation at any time, the valve should be turned end for end on the "HL" size pump, and the valve and coverplate positions should be transposed on the "K", "KK", "LQ" and "LL" sizes.</p>

The Viking "gear-within-a-gear" pumping principle plus specially designed components, custom tailor the Series 4925 pumps for safe, efficient handling of refrigeration ammonia. Pumps operate equally well in either direction.

They are the accepted answer for refrigeration systems requiring ammonia recirculating pumps. Their slow speed results in extended pump life and reduces handling costs to a minimum.

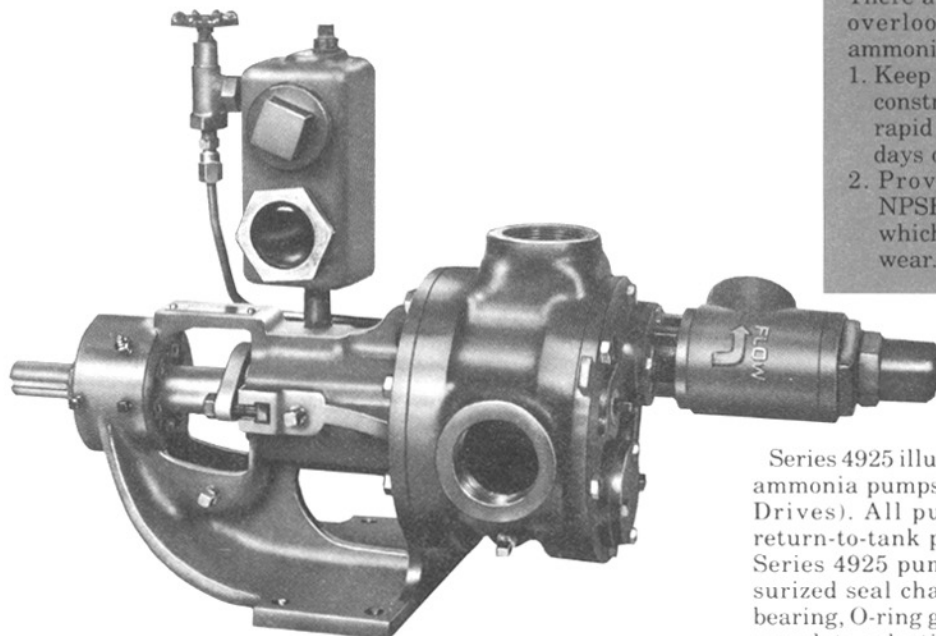
ADDITIONAL FEATURES AVAILABLE ON SPECIAL REQUEST FOR VIKING SERIES 4925 REFRIGERATION AMMONIA PUMPS

- 1. Sight Glass(es) in Oil Reservoir.** An extra sight glass can be furnished to fit into the top plug on the oil reservoir and permits easier checking of the refrigeration oil level.
 - 2. Sight Glass With Frost Shield.** This prevents the sight glass from being covered with frost when the pumping unit is installed in a cold room.
 - 3. Filling Valve.** A filling valve can be furnished to permit easy refilling of oil reservoir without stopping pump.
 - 4. Oil Reservoir Heater. (Not Illustrated)** An electric immersion type heater to provide adequate reservoir oil temperature if pumping unit is installed in cold room.
- When ordering, specify these special features.



① For operation at differential pressures between 35 and 50 PSI, consult factory.
 ② Special provision for heating oil in seal chamber may be necessary below -20° F. depending on ambient temperature around pumps. Under some conditions, use of a packed type pump may be considered for sub-zero temperatures.
 ③ Nominal Rating only. See Performance Data pages 420.9, 420.11, and 420.12.
 ④ Single reservoir sight glass is standard. Images are shown with optional reservoir fittings.

UNMOUNTED PUMPS



SERIES 4925 Pumps.
"KK" Size, shown with oil reservoir
and return-to-tank valve.

CAUTION

There are two major points that must not be overlooked when installing refrigeration ammonia pumps:

1. Keep the system as clean as possible during construction. Dirt in a new system will cause rapid pump wear during the initial hours/days of operation.
2. Provide adequate NPSH_A. Inadequate NPSH_A at the pump will result in cavitation which causes noise, low capacity and rapid wear. (Refer to page 420.9.)

Series 4925 illustrates the basic unmounted refrigeration ammonia pumps used with mounted units ("R" and "V" Drives). All pumps come complete with adjustable return-to-tank pressure relief valve on pump head. All Series 4925 pumps have double mechanical seal, pressurized seal chamber and oil reservoir, integral thrust bearing, O-ring gaskets and revolvable casing for easy and complete selection of port locations to suit your piping. They also come equipped with carbon graphite idler and bracket bushings and are constructed of materials listed below.

Dimensions for Unmounted Pumps—See Page 420.7.

Performance Data for Unmounted Pumps—See Pages 420.9, 420.11, and 420.12.

CONSTRUCTION — SERIES 4925 ("HL" THROUGH "LL" SIZES)

Pump Construction	Casing	Head	Bracket	Rotor	Idler	Rotor Shaft and Idler Pin	Bushings		Mechanical Seal	Return-to-Tank Relief Valve
							Idler	Bracket		
Standard Construction	Iron	Iron	Iron	Iron	① Iron	Steel	Carbon Graphite	Carbon Graphite	Double Neoprene	Iron

SPECIFICATIONS — UNMOUNTED PUMPS

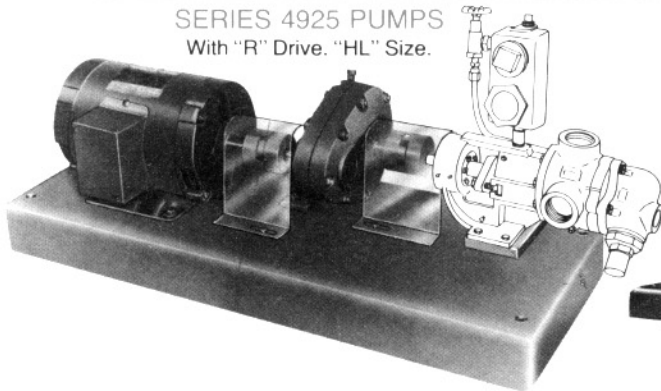
Model Number	② Port Size Inches	Nominal Pump Rating		Motor Horsepower Required at Rated Speed		Maximum Recommended Differential Pressure PSI	④ Minimum Recommended Temperature for Cataloged Pump °F.	Approximate Shipping Weight With Valve and Oil Reservoir Pounds
		GPM	RPM	25 PSI	35 PSI			
	HL4925	1½	10	780	¾	¾	50	-20	70
K4925	2	20	280	¾	1	50	-20	135
KK4925	2	30	280	1	1½	50	-20	140
LQ4925	③ 2½	50	280	1½	2	50	-20	215
LL4925	③ 3	60	280	2	3	50	-20	230

① "HL" size has Viskoted cast iron idler
 ② Suction piping recommended one size larger than pump port.
 ③ Flanged ports; pumps furnished with threaded companion flanges. All other models tapped for standard pipe.

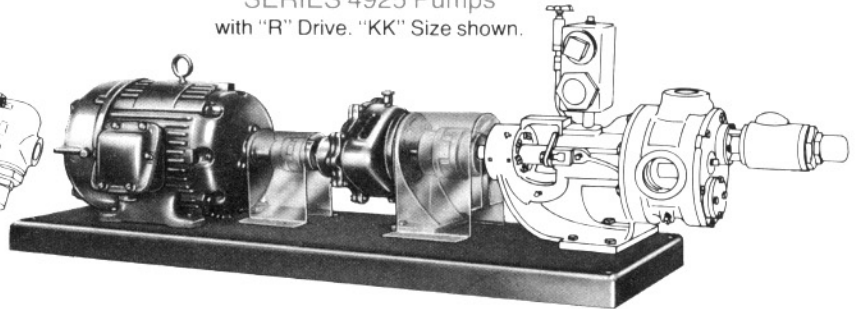
④ Pumps can be used to -40°F. if provision is made for providing heat to oil in seal chamber. Under some conditions, use of a packed type pump may be considered for sub-zero temperatures.

VIKING HELICAL GEAR REDUCER UNITS ("R" DRIVE)

SERIES 4925 PUMPS
With "R" Drive. "HL" Size.



SERIES 4925 Pumps
with "R" Drive. "KK" Size shown.



The "HL", "K", "KK", "LQ" and "LL" size Series 4925 pumps are available mounted on a low, compact steel base with helical reducer ("R" drive). "A" size reducer for "HL" pump, "B" size reducer for all other size pumps. These units feature the Series 4925 pumps and come complete with base, couplings with guards and reducer, with or ready to accept motor.

FEATURES:

1. Mounts NEMA std. motors, 1800 or 1200 RPM.
2. Various reductions available if needed. All interchangeable on units.
3. Quiet operation. (High hardness helical gears running in a bath of oil.)

4. Compact. Narrow and low to fit in small space and low overhead. (Base height of only 4" helps keep pump inlet port below ammonia accumulator level.)
5. Pump, motor or reducer can be removed without disturbing other two components.
6. Standard flexible couplings between power and reducer as well as reducer and pump permit easy alignment.
7. Ball bearings throughout reducer.
8. Self supported "B" reducer. No radial load on pump or motor shaft.

Dimensions for "R" Drive Units—See Pages 420.7 and 420.8.

Performance Data for "R" Drive Units—See Pages 420.9, 420.11, and 420.12.

HELICAL REDUCER SPECIFICATIONS. UNIT MODEL NUMBERS AND PUMP CAPACITY TABLE

Motor RPM	Reducer Ratio	Maximum Reducer HP	Pump RPM	Pump Capacity With "A" Size Reducer		Pump Capacity With "B" Size Reducer							
				HL4925R		K4925R		KK4925R		LQ4925R		LL4925R	
				25 PSI	35 PSI	25 PSI	35 PSI	25 PSI	35 PSI	25 PSI	35 PSI	25 PSI	35 PSI
1800	2.76 to 1	5	640	9.0	8.3	...	...	...	...	...	...	...	...
	3.43 to 1	5	520	6.8	6.0	...	...	...	...	...	...	...	...
	4.17 to 1	3	420	4.9	4.1	...	...	...	...	...	...	...	...
1200	2.76 to 1	3	420	4.9	4.1	...	...	...	...	...	...	...	...
	3.43 to 1	3	350	3.5	2.8	...	...	...	...	...	...	...	...
	4.17 to 1	2	280	2.3	1.5	...	...	...	...	...	...	...	...
1800	6.27 to 1	7½	280	...	...	23.0	21.4	30.8	28.8	46.5	44.0	65.0	62.0
	7.65 to 1	5	230	...	...	18.0	15.5	23.7	21.6	35.0	33.0	50.5	47.0
1200	4.19 to 1	7½	280	...	...	23.0	21.4	30.8	28.8	46.5	44.0	65.0	62.0
	5.06 to 1	7½	230	...	...	18.0	15.5	23.7	21.6	35.0	33.0	50.5	47.0
	6.27 to 1	5	190	...	...	14.2	12.5	17.8	15.5	25.5	24.0	37.0	34.0
	7.65 to 1	5	155	...	...	10.9	9.4	13.0	11.0	18.0	16.0	27.5	25.0

SPECIFICATIONS — "R" DRIVE UNITS

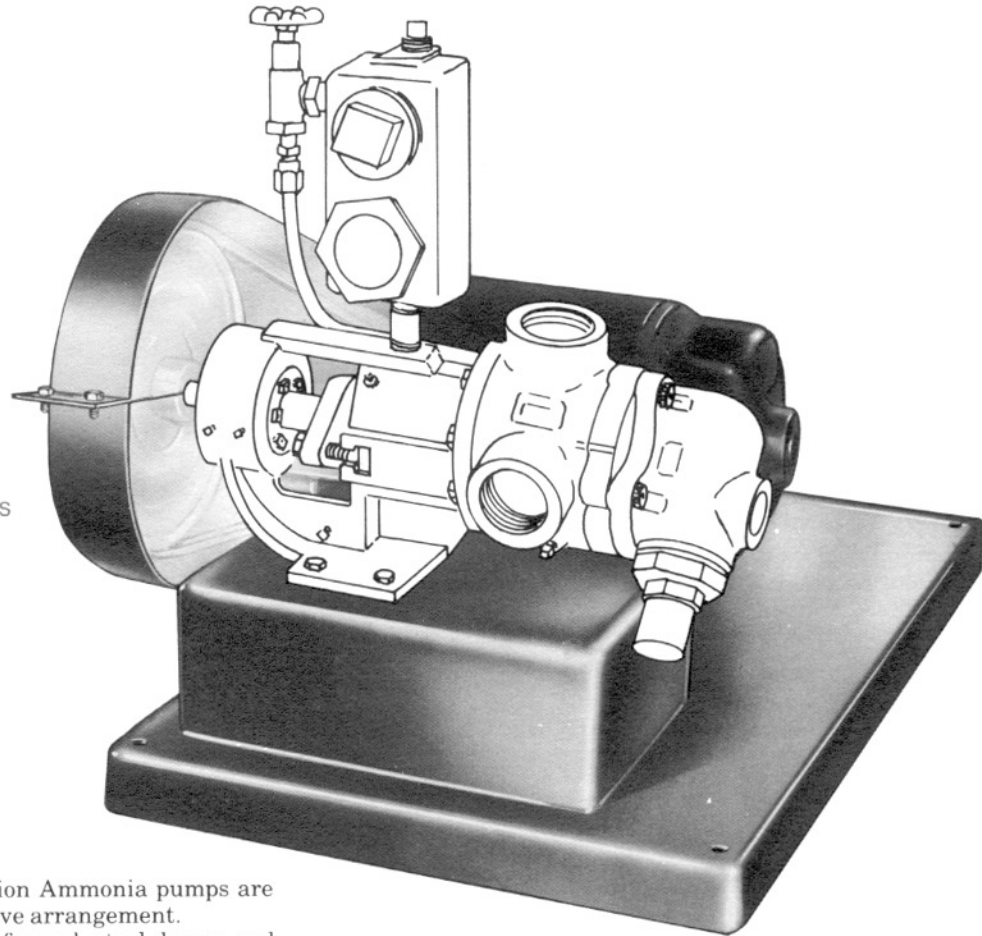
Model Number	① Port Size	Nominal Pump Rating		Motor Horsepower Required at Rated Speed		Maximum Recommended Differential Pressure PSI	③ Minimum Recommended Temperature For Cataloged Pump °F.	Approximate Shipping Weight With Valve and Oil Reservoir (Less Power) Pounds
	Inches	GPM	RPM	25 PSI	35 PSI			
HL4925R	1½	8	640	¾	¾	50	-20	150
K4925R	2	20	280	¾	1	50	-20	355
KK4925R	2	30	280	1	1½	50	-20	360
LQ4925R	② 2½	50	280	1½	2	50	-20	445
LL4925R	② 3	60	280	2	3	50	-20	480

① Suction piping recommended one size larger than pump port.

② Flanged ports; pumps furnished with threaded companion flanges. All other models tapped for standard pipe.

③ Pumps can be used to -40°F. if provision is made for providing heat to oil in seal chamber. Under some conditions, use of a packed type pump may be considered for sub-zero temperatures.

V-BELT DRIVE UNITS ("V" DRIVE)



SERIES 4925 Pumps
With "V" Drive.
"HL" Size shown.

Viking Series 4925 Refrigeration Ammonia pumps are furnished with popular V-belt drive arrangement.

The pumps are mounted on formed steel bases and connect to 1200 or 1800 RPM motors with totally guarded V-belt drives. For smooth, quiet as well as positive transmission of power, these units are ideal. The motors are mounted on slide rail bases to keep correct tension on belts.

Maximum standard reduction is 4½ to 1 on "HL" size units, 6 to 1 on "K" and larger sizes.

Dimension for "V" Drive Units—See Page 420.8.

Performance Data for "V" Drive Units—See Pages 420.9, 420.11, and 420.12.

SPECIFICATIONS — "V" DRIVE UNITS

Model Number	① Port Size	Nominal Pump Rating		Motor Horsepower Required at Rated Speed		Maximum Recommended Differential Pressure PSI	③ Minimum Recommended Temperature For Cataloged Pump °F.	Approximate Shipping Weight With Valve and Oil Reservoir (Less Power) Pounds
	Inches	GPM	RPM	25 PSI	35 PSI			
HL4925V	1½	10	780	¾	¾	50	-20	135
K4925V	2	20	280	¾	1	50	-20	285
KK4925V	2	30	280	1	1½	50	-20	290
LQ4925V	② 2½	50	280	1½	2	50	-20	360
LL4925V	② 3	60	280	2	3	50	-20	385

① Suction piping recommended one size larger than pump port.

② Flanged ports; pumps furnished with threaded companion flanges. All other models tapped for standard pipe.

③ Pumps can be used to -40°F. if provision is made for providing heat to oil in seal chamber. Under some conditions, use of a packed type pump may be considered for sub-zero temperatures.

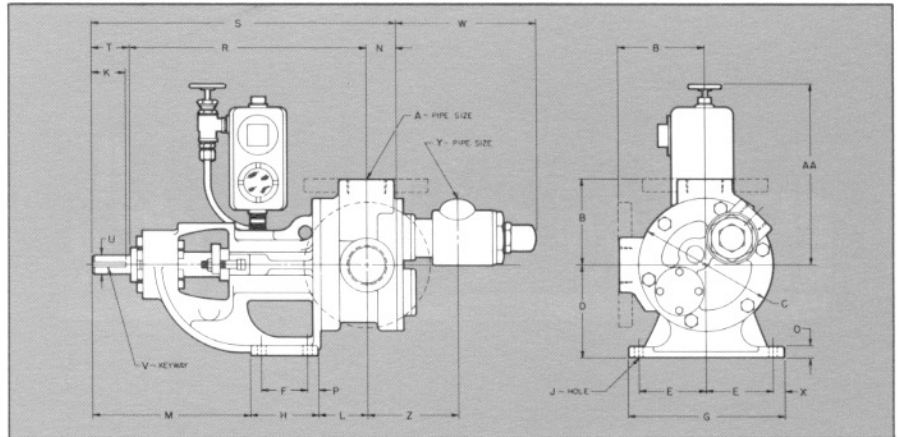
DIMENSIONS

These dimensions are average and not for construction purposes. Certified prints on request.

For specifications, see page 420.4

**DIMENSIONS—
SERIES 4925
UNMOUNTED PUMPS
“HL” THROUGH “LL” SIZES**

① Flanged ports; pumps furnished with threaded companion flanges. All other models tapped for standard models.
NOTE: Dimensions shown in gray area are millimeters; others are inches.



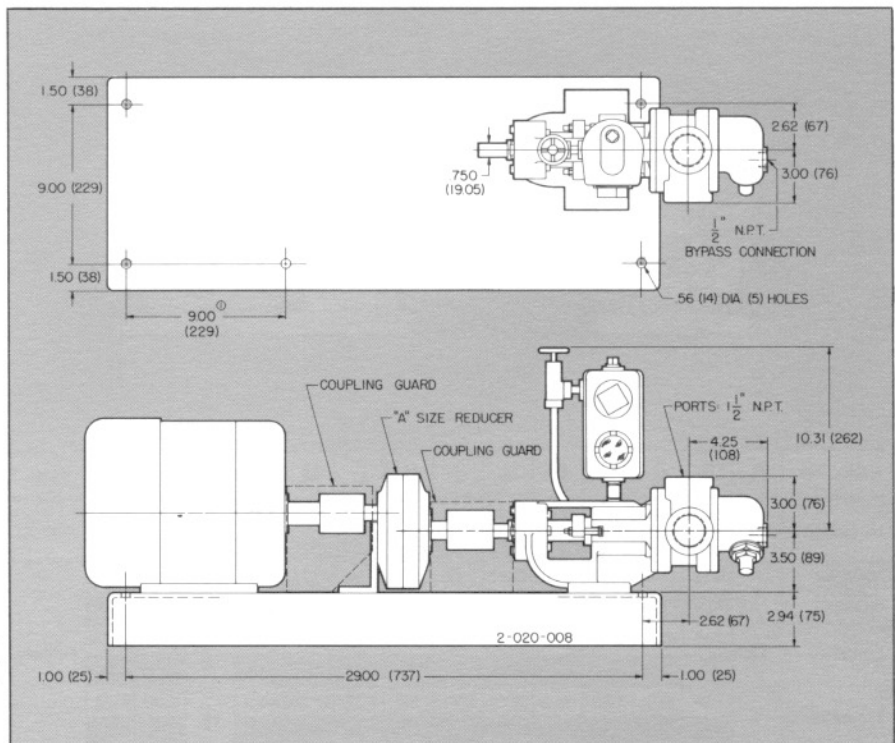
MODEL NO.	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	R	S	T	U	V	W	X	Y	Z	AA
HL4925	1 1/2	3.00	4.75	3.50	2.75	2.25	6.75	3.50	.47	1.50	3.38	5.19	1.19	.56	.62	10.44	13.25	1.62	.750	.19 X .09	3.06	.62	1/2	0	10.31
		76	121	89	70	57	171	89	12	38	86	132	30	14	16	265	337	41	19.05	4.76 X 2.38	78	16	0	262	
K 4925 AND KK 4925	2	5.12	8.00	5.50	4.00	2.75	9.25	4.00	53	2.00	3.00	9.38	1.75	.62	.62	14.12	18.12	2.25	1.125	.25 X .12	9.00	.62	1/4	5.38	10.75
		130	203	140	102	70	235	102	13	51	76	238	44	16	16	359	460	57	28.58	6.35 X 3.18	229	16	137	273	
LQ4925	① 2 1/2	7.19	10.25	7.00	4.38	4.00	10.00	5.38	53	2.00	3.38	9.12	1.75	.62	.62	15.62	19.62	2.25	1.125	.25 X .12	9.00	.62	1/2	5.50	10.75
		183	260	178	111	102	254	137	13	51	86	232	44	16	16	397	498	57	28.58	6.35 X 3.18	229	16	140	273	
LL4925	① 3	7.19	10.25	7.00	4.38	4.00	10.00	5.38	53	2.00	3.38	9.12	2.25	.62	.62	15.62	20.12	2.25	1.125	.25 X .12	9.00	.62	1/2	6.00	10.75
		183	260	178	111	102	254	137	13	51	86	232	57	16	16	397	511	57	28.58	6.35 X 3.18	229	16	152	273	

For specifications, see page 420.5

**DIMENSIONS—
SERIES 4925
("R" DRIVE)
“HL” SIZE PUMP**

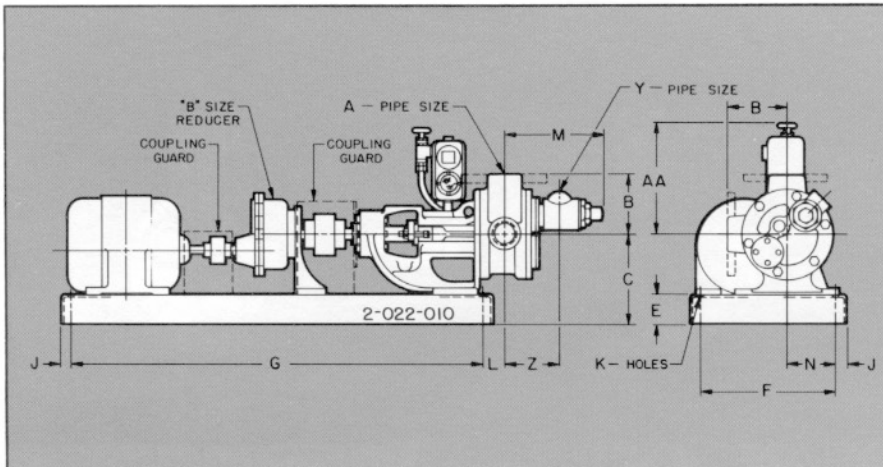
① With motor frames 182-T and smaller, use the (4) corner base anchor holes. Motor frame 184-T covers up the lower left corner anchor hole, so the hole 9" to the right is used.

NOTE: Dimensions shown in inches, with millimeter equivalent shown in parentheses.



DIMENSIONS

These dimensions are average and not for construction purposes. Certified prints on request.



For specifications, see page 420.5

**DIMENSIONS—
SERIES 4925
("R" DRIVE)
"K" THROUGH "LL" SIZE
PUMPS**

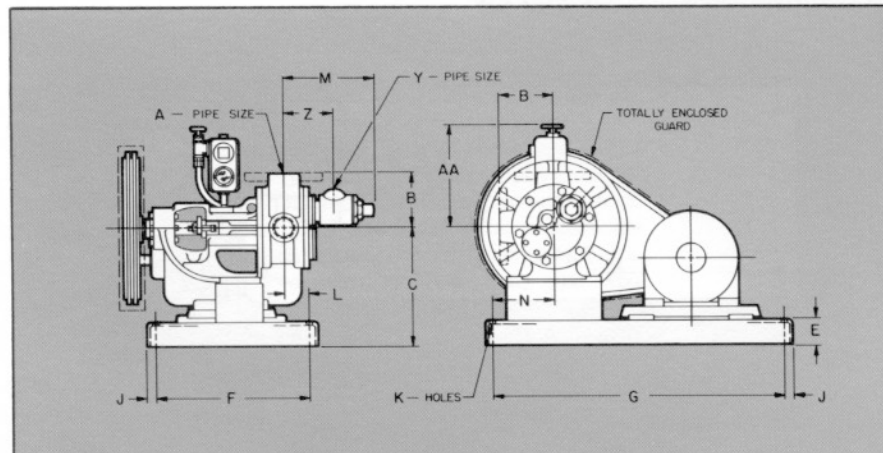
MODEL NO.	A	B	C	E	F	G	J	K	L	M	N	Y	Z	AA
② K4925R AND KK4925R	2	5.12	9.50	4.00	14.25	48.00	1.38	.62	2.00	10.75	4.25	1/4	5.38	10.75
		130	241	102	362	1219	35	16	51	273	108		137	273
LQ4925R	① 2 1/2	7.19	11.00	4.00	14.25	48.00	1.38	.62	2.38	10.75	4.62	1/2	5.50	10.75
		183	279	102	362	1219	35	16	60	273	117		140	273
LL4925R	① 3	7.19	11.00	4.00	14.25	48.00	1.38	.62	2.38	11.25	4.62	1/2	6.00	10.75
		183	279	102	362	1219	35	16	60	286	117		152	273

① Flanged ports; pumps furnished with threaded companion flanges. All other models tapped for standard pipe.

② With motor frames 184-T and smaller, these units are assembled on a shorter base with the following dimension changes: (F = 16", G = 39", "L" = 3", N = 5 1/2"). Motor rails 1 1/8" high are required with 56, 143-T and 145-T frame motors.

NOTE: Motor rails 2" high are required on "LQ" and "LL" size units with 184-T or 4 1/2" center height motors.

NOTE: Dimensions shown in gray area are millimeters; others are inches.



For specifications, see page 420.6

**DIMENSIONS—
SERIES 4925
("V" DRIVE)
"HL" THROUGH "LL" SIZE
PUMPS**

MODEL NO.	A	B	C	E	F	G	J	K	L	M	N	Y	Z	AA	BASE
② HL4925V	1 1/2	3.00	9.25	1.75	14.75	23.75	.75	.50	4.88	4.25	4.25	1/2	10.31	3-027-001	
		76	235	44	375	603	19	13	124	108	108		262		
③ K4925V AND KK4925V	2	5.12	13.81	3.25	17.00	28.75	1.00	.50	2.50	10.75	5.25	1/4	5.38	10.75	
		130	351	83	432	730	25	13	64	273	133		137	273	
③ LQ4925V	① 2 1/2	7.19	15.31	3.25	17.00	28.75	1.00	.50	2.25	10.75	5.25	1/2	5.50	10.75	
		183	389	83	432	730	25	13	57	273	133		140	273	
③ LL4925V	① 3	7.19	15.31	3.25	17.00	28.75	1.00	.50	2.25	11.25	5.25	1/2	6.00	10.75	
		183	389	83	432	730	25	13	57	286	133		152	273	

① Flanged ports; pumps furnished with threaded companion flanges. All other models tapped for standard pipe.

② Base dimensions correct for all motors.

③ Base dimensions correct through frame 215-T motors and 19" OD sheaves. Larger motors and/or 25" OD sheaves require larger base.

NOTE: Dimensions shown in gray area are millimeters; others are inches.